

Comparisons of Job Characteristics

Focus Occupation: [Electronics Engineers, Except Computer \(17-2072\)](#)

Associated Occupation: [Engineers, All Other \(17-2199\)](#)

[Compare Knowledge](#)

[Compare Skills](#)

[Compare Abilities](#)

[Compare Detailed Work Activities](#)

[Compare Tools and Technologies](#)

| | |
|----|--|
| << | Focus occupation element is much lower |
| < | Focus occupation element is lower |
| 0 | Focus occupation element is at a similar level |
| > | Focus occupation element is at a higher level |
| >> | Focus occupation element is at a much higher level |

Knowledge

Similarity of Focus Occupation to Associated Occupation: 94

Focus Occupation: Electronics Engineers, Except Computer (17-2072)

Associated Occupation: Engineers, All Other (17-2199)

| Associated Occupation's Key Knowledge Elements | Average Rating, All Occupations | Associated Occupation's Rating | Focus Occupation's Rating | | Evaluation of Focus Occupation |
|--|---------------------------------|--------------------------------|---------------------------|----|--|
| Engineering and Technology | 5.7 | 20.1 | 20.8 | 0 | Current knowledge level may be sufficient |
| Mathematics | 9.2 | 17.1 | 16.8 | 0 | Current knowledge level may be sufficient |
| Design | 5.2 | 16.5 | 20.6 | >> | Current knowledge level is likely more than sufficient |
| Computers and Electronics | 8.4 | 15.0 | 19.7 | >> | Current knowledge level is likely more than sufficient |
| Physics | 4.3 | 14.8 | 11.6 | << | Extensive education and/or training may be required |
| Mechanical | 6.8 | 14.0 | 9.9 | << | Extensive education and/or training may be required |
| Production and Processing | 6.0 | 12.9 | 11.1 | < | Expanded education and/or training may be required |
| Building and Construction | 4.0 | 6.6 | 4.6 | << | Extensive education and/or training may be required |

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Skills

Similarity of Focus Occupation to Associated Occupation: 84

Focus Occupation: Electronics Engineers, Except Computer (17-2072)

Associated Occupation: Engineers, All Other (17-2199)

| Associated Occupation's Key Skills Elements | Average Rating, All Occupations | Associated Occupation's Rating | Focus Occupation's Rating | | Evaluation of Focus Occupation |
|---|---------------------------------|--------------------------------|---------------------------|----|--|
| Mathematics | 6.2 | 12.8 | 10.1 | < | A higher skill level may be required |
| Systems Analysis | 6.5 | 11.7 | 12.5 | 0 | Current skill level may be sufficient |
| Science | 4.5 | 11.4 | 7.2 | << | Extensive development of skills in this area may be required |

| | | | | | |
|---------------------|-----|------|------|----|--|
| Systems Evaluation | 6.4 | 11.1 | 10.7 | 0 | Current skill level may be sufficient |
| Operations Analysis | 5.0 | 10.8 | 8.3 | << | Extensive development of skills in this area may be required |
| Technology Design | 2.6 | 7.9 | 8.1 | 0 | Current skill level may be sufficient |
| Equipment Selection | 3.3 | 6.3 | 9.0 | >> | Skill level is likely more than sufficient |
| Programming | 2.2 | 5.3 | 8.1 | >> | Skill level is likely more than sufficient |

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Abilities

Similarity of Focus Occupation to Associated Occupation: 97

Focus Occupation: Electronics Engineers, Except Computer (17-2072)

Associated Occupation: Engineers, All Other (17-2199)

| Associated Occupation's Key Abilities Elements | Average Rating, All Occupations | Associated Occupation's Rating | Focus Occupation's Rating | Evaluation of Focus Occupation | |
|--|---------------------------------|--------------------------------|---------------------------|--------------------------------|--|
| Written Comprehension | 11.0 | 15.1 | 14.5 | 0 | Current ability level may be sufficient |
| Deductive Reasoning | 10.6 | 15.0 | 12.5 | < | Some improvement in abilities may be required |
| Inductive Reasoning | 10.2 | 13.7 | 12.8 | 0 | Current ability level may be sufficient |
| Mathematical Reasoning | 6.3 | 13.4 | 12.8 | 0 | Current ability level may be sufficient |
| Information Ordering | 9.9 | 13.2 | 13.3 | 0 | Current ability level may be sufficient |
| Category Flexibility | 9.0 | 12.3 | 11.6 | 0 | Current ability level may be sufficient |
| Originality | 7.6 | 11.8 | 10.7 | < | Some improvement in abilities may be required |
| Visualization | 7.5 | 11.7 | 11.0 | 0 | Current ability level may be sufficient |
| Number Facility | 6.3 | 11.6 | 8.7 | << | Extensive improvement in abilities may be required |
| Fluency of Ideas | 7.6 | 11.4 | 10.5 | 0 | Current ability level may be sufficient |

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

There are no common work activities.

Tools and Technologies that Both Occupations Have in Common

Similarity of Focus Occupation to Associated Occupation: 87

Focus Occupation: Electronics Engineers, Except Computer (17-2072)

Associated Occupation: Engineers, All Other (17-2199)

| Tools and Technologies | Exclusivity |
|--|-------------|
| Business function specific software | 1 |
| Computers | 1 |
| Content authoring and editing software | 1 |
| Data management and query software | 1 |
| Development software | 4 |
| Electrical measuring and testing equipment | 7 |

| | |
|--|----|
| Electronic and communication measuring and testing instruments | 14 |
| Finance accounting and enterprise resource planning ERP software | 2 |
| Indicating and recording instruments | 2 |
| Industry specific software | 1 |
| Information exchange software | 1 |
| Integrated circuits | 18 |
| Light and wave generating and measuring equipment | 4 |
| Network applications software | 1 |
| Operating environment software | 12 |

Not all positions in these occupations will necessarily use all of the listed tools and technologies. The exclusivity rating is an indication of how unique the tool or technology is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations use that tool or technology.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.